35271

9,2110 (1001,1153,1385)

S/196/62/000/006/005/018 E194/E154

AUTHORS:

Kuchinskiy, G.S., and Irkayeva, K.M.

TITLE:

The inductance of capacitors made of rolled foil

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.6, 1962, 8, abstract 6 B41. (Vestn. elektroprom-sti, no.11, 1961, 38-41)

Capacitors used to produce high impulse currents with TEXT: high frequency oscillations on discharge must have minimum inductance. For a capacitance of 0.1 microfarads the inductance should be equal to or less than 0.03 microhenries to ensure a discharge frequency of 3 Mc/s. The capacitor inductance depends on the inductance of the foil, the internal connections and the external terminals. For foils with integral terminals the foil inductance is

 $L_1 = \frac{\mu_0 \ell}{3b} (2d + 3a)$

where: a is the distance between interleaved insulating spacers; b, d and ℓ are respectively the width, thickness and length of Card 1/3

The inductance of capacitors

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the spacers. If the terminals are displaced, L₁ is increased by an amount that depends on the location of the terminals. The inductance of internal connections calculated for a single terminal in the form of a flat foil when the terminals are displaced by up to a section width is:

$$L_2 = \frac{\mu_0 \ell}{2 J \ell} \left(\ln \frac{2 \ell}{b} + \frac{1}{2} \right)$$

where b and ℓ are respectively the width and the length of the terminals. Various other constructions and terminal arrangements are considered and curves of inductance are given. It is shown that 'inductionless winding' (with projecting foils) may, with a large number of foils connected in series, give greater inductance than ordinary windings with terminals brought out to one end. Increasing the number of terminals does not reduce L_1 much. The limiting resonance frequency of a capacitor is inversely proportional to the cross-section of the foils and does not depend on the foil width. The wave

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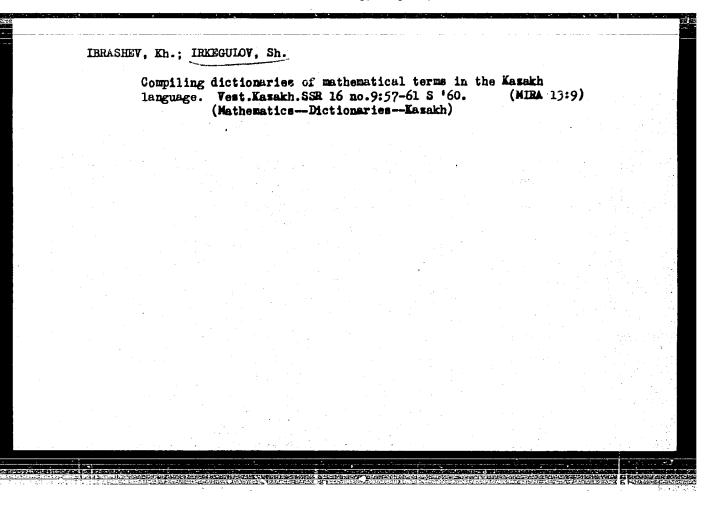
The inductance of capacitors ... \$/196/62/000/006/005/018

resistance is inversely proportional to the foil width and does not depend on the cross-sectional area. To increase the area of the foil its width should be increased.

2 literature references.

[Abstractor's note: Complete translation.]

Card 3/3



IRKHEN, A. "On the diseases of Cotoin (Coto Tree?)." Zs Novoe Volokno, no.3. 1933, pp.1-6. 73.8 Z12

So: SIRA SI-90-53, 15 Dec. 1951

16.3800

9/044/62/000/011/023/064 A060/A000

AUTHOR:

Irkegulov, Sh.T.

TITLE:

On the general boundary problem for a harmonic function in a multiply-connected region

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 11, 1962, 57 - 58, abstract 11B229 (Tr. Mekhan.-matem. fak. Kazakhsk. un-t, 1960, v. 1, no. 2, 94 - 103)

TEXT: Let T be a (p+1) times connected region bounded by simple nonintersecting curves with continuous curvature L_0, L_1, \ldots, L_m , of which L_0 contains the remaining ones, and $\Gamma_1, \ldots, \Gamma_1$ smooth simple nonintersecting closed curves lying entirely within T, and let T* be, the region remaining after excluding the curves Γ_∞ from T. The following boundary problem is considered. To find a function U (x, y) harmonic in T* and continuous in T which satisfies the boundary conditions

$$\frac{\partial v}{\partial u_1} = \frac{\partial v}{\partial n_e}$$
 $H_{ot}(s) + f_{ot}(s)$ on Γ_{ot} , $ot = 1, 2, ..., 1$,

Card 1/2

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On the general boundary problem for a

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$$\sum \sum_{k,j} a_{k,j}^{(q)}(s) \frac{\partial^k u}{\partial x^k - i \partial yi} = F_q(s) \text{ on } L_q, q = 0, 1, 2, ..., p.$$

Similar problems of a somewist more special form had been analyzed by D.I. Sherman (Izv. AN SSSR.Ser. matem., 1946, v.10, no. 2) and Ye.I. Kim (Prikl. matem. i mekhan., 1952, v. 16, no. 2). By using an integral representation of the requisite function similar to those employed in the above-mentioned papers, the author reduces the boundary problem to an integral equation. Fredholm's theorems make it possible to formulate certain conclusions as to the existence of a solution and the number of linearly independent solutions of the problem under consideration.

F.D. Gakhov

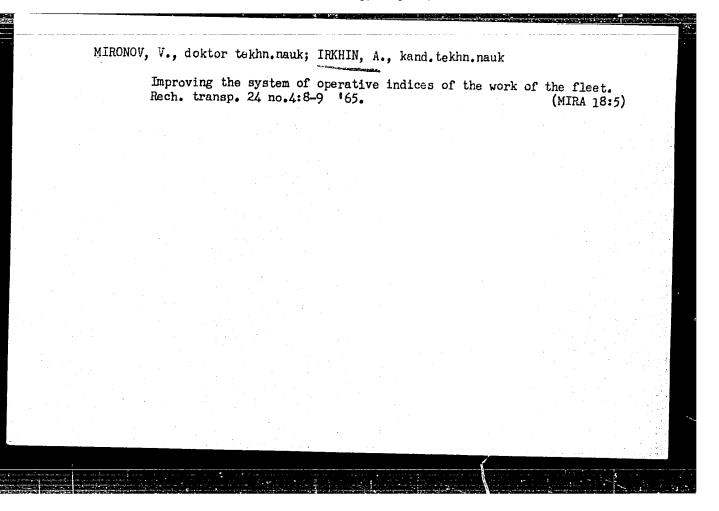
[Abstracter's note: Complete translation]

Card 2/2

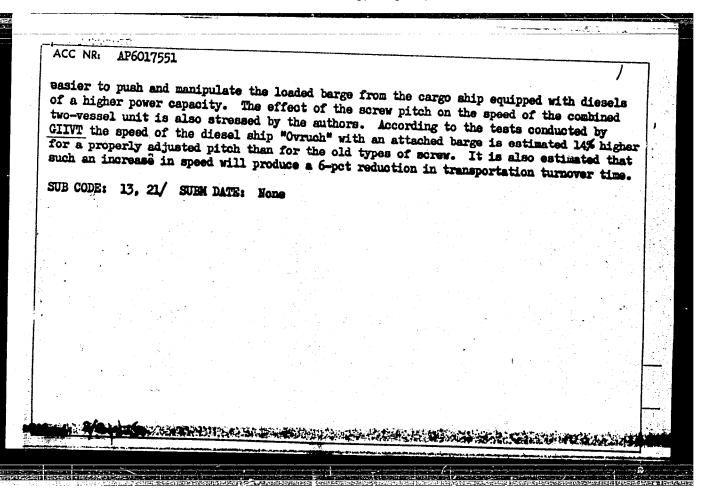
IRKHIN, A., kand. tekhn. nauk

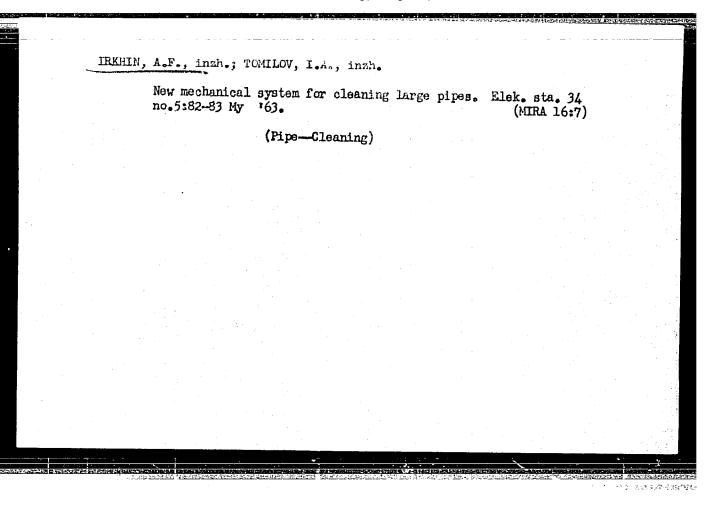
Methods of calculating the estimated cost of loading and unloading operations. Rech. transp. 22 no.8:18-20 Ag '63. (MIRA 16:10)

(Loading and unloading)



ACC NR: AP601/551 SOURCE CODE: UR/0310/66/000/001/0008/0010 AUTHOR: Irkhin, A. (Candidate of technical sciences); Murav'yev, A. (Candidate of ORG: [Murav'yev] LIVT TITLE: Operation of diesel cargo ships with attached barges B SOURCE: Rechnoy transport, no. 1, 1966, 8-10 TOPIC TAGS: marine engineering, diesel engine, inland waterway transportation , CARGO ABSTRACT: The economics of using special combined ship-and-barge units for inland waterway transportation are discussed. The unit consists of a diesel cargo ship and a freight barge. The barge stern is lashed to the ship's bow. After a general discussion, the authors present their estimates and conclusions. According to their estimates, a 50-pet increase in power capacity of main diesel engines is expedient for a more efficient operation of the combined ship-and-barge unit. It is suggested that this increase can be obtained by providing turbosupercharging air to the existing engine. It is estimated that the increase in power from about 800 to 1200 hp will assure an increase of 15% in speed and of 9% in productivity while the cost in transportation will be only 1.7%. Under these conditions, the transportation of goods by the combined unit will be 22% less expensive than the delivery in a cargo ship without an attached barge. In addition, it is 1/2 Card VDC: 629.122.004





IRKHIN, A. P.

Ognovnye printsipy pravil tekhnicheskoi eksploatatsii vnutrennikh vodnykh putel SSSR. Basic principles of rules for technical exploitation of inland waterways of the U. S. S. R. (Vodnyi transport, 1937, no. 2, p. 13-14). DLC: HE561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
Reference Department, Washington, 1952, Unclassified.

IRKHIN, A. P. and SOLOV'EV, L.

Posoble k primeneniiu grafika dvizheniia sudov i tekunicheskogo plana raboty flota.
/_ Manual for utilization of time schedule for vessel movement and the technical plan for fleet operation /. Moskva, Rechizdat, 1944. 176 p. illus.

So: Moviet Transportation and Communications. A Bibliography. Library of Congress. Reference Department, Washington, 1952, Unclassified. One of No.

IRKHIN, A. P.

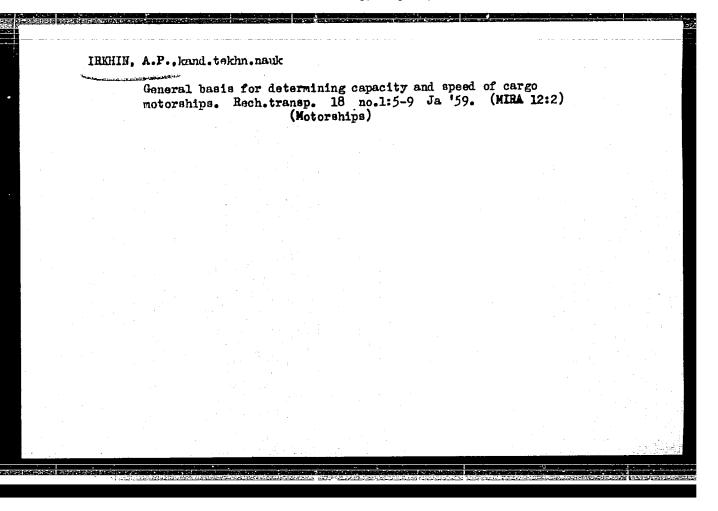
Usloviia effektivnoi organizatsii dvizheniia samokhodnogo gruzovogo flota. / Conditions for efficient organization of freighter fleet movement / (Rechnoi transport, 1949, no. 3. p. 14-17.)

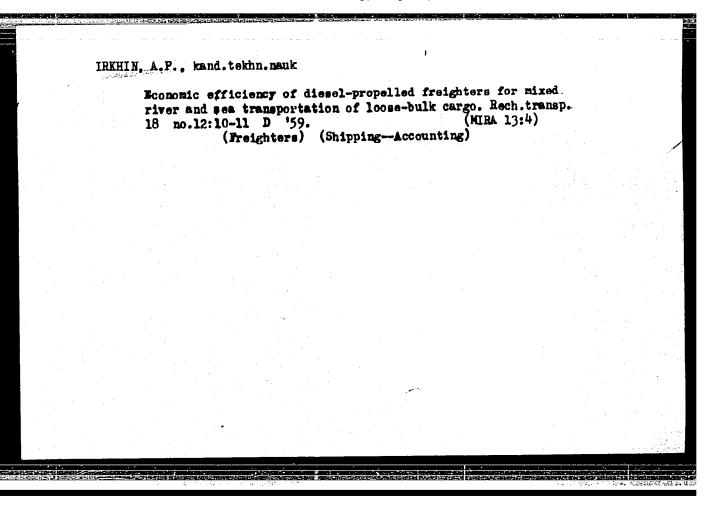
DLC: TC601.R4

S0: Soviet Transportation and Communications, A. Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

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	2737. Ithin, A. P., and Machanak, E. Jia Attitude when in ac-	£
	tion and velocity characteristic of treight motor vessels of the "Great Veloa" type (in Russian), Rech. Transport no. 3, 15-19.	ar en e
	1955; Ref. Zb. Mekh. 1956, Rev. 60. 3861.	
	Results are described of the systematized model and natural	
	The views of a freight motor vessel of the type "Great Volga" for the	
	Determination of its resistance to movement and of the value of the attitude when in motion in aballow water and in a canal. The	
	model tours were made in the small TSNIRK reservoir, and the	
	natural gests in different ceaches of the Volge and in the "blos-	
	cow! canal. The object of the tests was to determine the depth	
	the bottom during the movement of versets of this type under full	
	nower of the main surface.	٠.
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	the determination of the articule of the vessel in the conditions described above, starting metely from the value of the reduction of	
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Basis for the over-all justification methods of motorboat freight capacity and propulsive speed as well as the rapidity of cargo handling. Trudy LILVT. Vop. ekon. i org. vod. transp. no.2:38-53 (Inland water transportation—Costs) (Cargo handling—Costs)





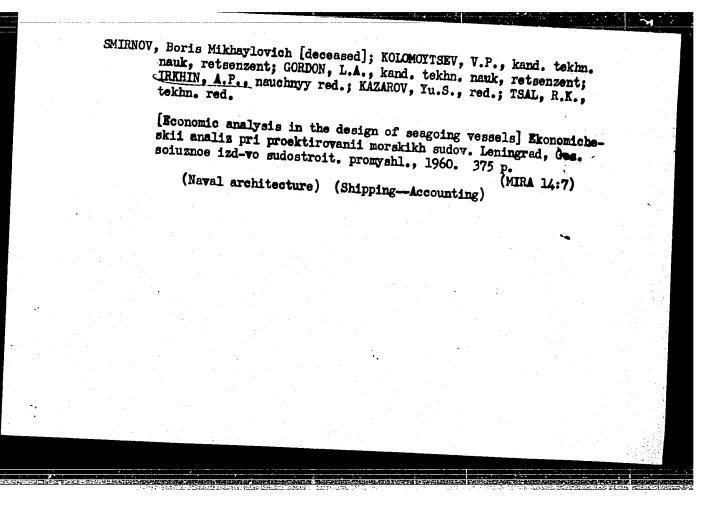
POVOROZHENKO, Vladimir Vasil'yevich, prof., doktor tekhn.nauk;
KOSTENKO, Ivan Georgiyevich, kand.tekhn.nauk; MAKHOTKIN,
Hikolay Aleksandrovich, insh.; HUMYANTSEV, Sergey Mikhaylovich, insh.; PARAKHOESKIY, Boris Mikhaylovich, kand.ekon.
nauk; SOLOV'IEV, Ivan Fomich, kand.tekhn.nauk; HAKAYEV,
V.G., doktor tekhn.nauk, red.; CHERMOMORDIK, G.I., doktor
tekhn.nauk, nauchnyy red.; IREHIE, A.P., kand.tekhn.nauk,
nauchnyy red.; KUDRYAVTSEV, A.S., doktor ekon.nauk, nauchnyy
red.; GLADTSIMOV, B.W., kand.tekhn.nauk, nauchnyy red.;
EYGHL', I.Yu., red.; LAVREMOVA, N.B., tekhn.red.

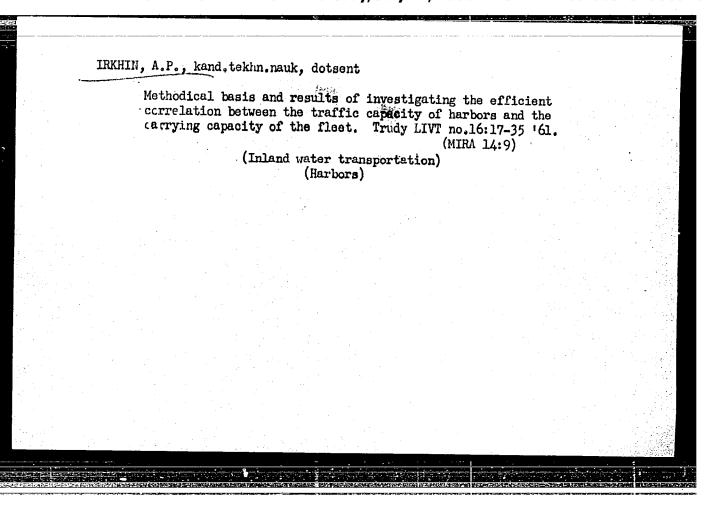
[Transportation in the U.S.S.R.] Transport SSSR. Pod obshchei red. V.G.Bakaeva. Moskva, Isd-vo "Morskoi transport," 1960. 536 p. (MIRA 13:7) (Transportation)

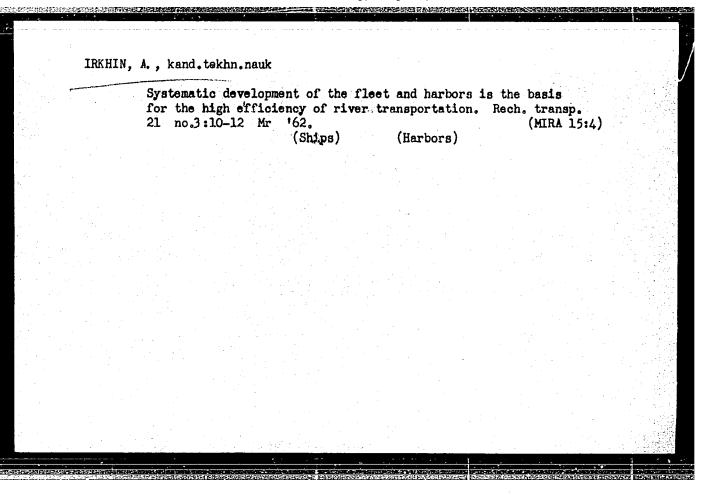
IRKHIN, Aleksandr Petrovich, kand.tekhn.nauk; YERPICHEV, Mikhail Ivanovich, insh.; TSYPIN, Yakov Yevgen'yevich, insh.; TIKHOMIROVA, Ye.H., red.; VOLCHOK, K.M., tekhn.red.

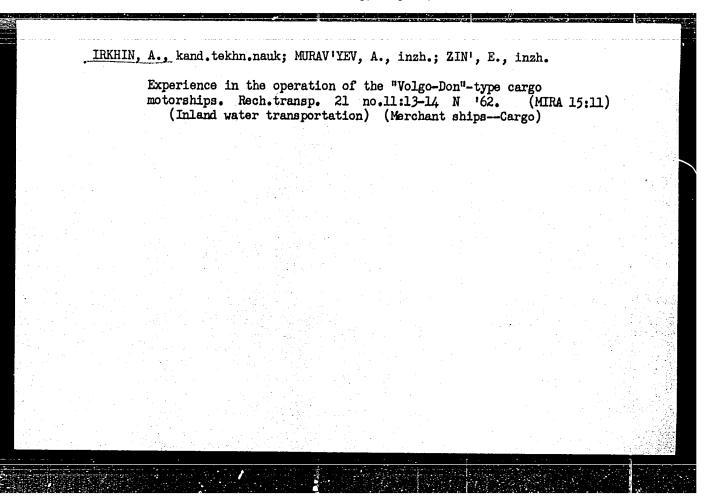
[Economic aspects and the organization of transportation by the self-propelled freighter fleet] Ekonomika i organizatsiia perevosok samokhodnym gruzovym flotom. Leningrad, Izd-vo "Rachnoi transport," Leningr.otd-nie, 1960. 94 p. (MIRA 13:9)

(Inland water transportation)









IRKHIN, Aleksandr Petrovich, kand. tekhn.nauk; YERPICHEV, Mikhail

Ivanovich, inzh.; TSYPIN, Yakov Yevgen'yevich, inzh.;
CHERNIY, N.Ya., red.; VOLCHOK, K.M., tekhn. red.

[The economics and organization of transportation via a self-propelled merchant marine fleet] Ekonomika i organizatiia perevozok samokhodnym gruzovym flotom. Izd.2., ispr. i dop. Moskva, Izd-vo "Rechnoi transport" 1963. 11k p.

(MIRA 16:10)

(Inland water transportation)

